



Approaches to CC Adaptation in Developing Countries and Examples from Sub-Saharan Africa

Olhoff, Anne

Publication date:
2009

Document Version
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

Citation (APA):
Olhoff, A. (Author). (2009). Approaches to CC Adaptation in Developing Countries and Examples from Sub-Saharan Africa. Sound/Visual production (digital)

General rights

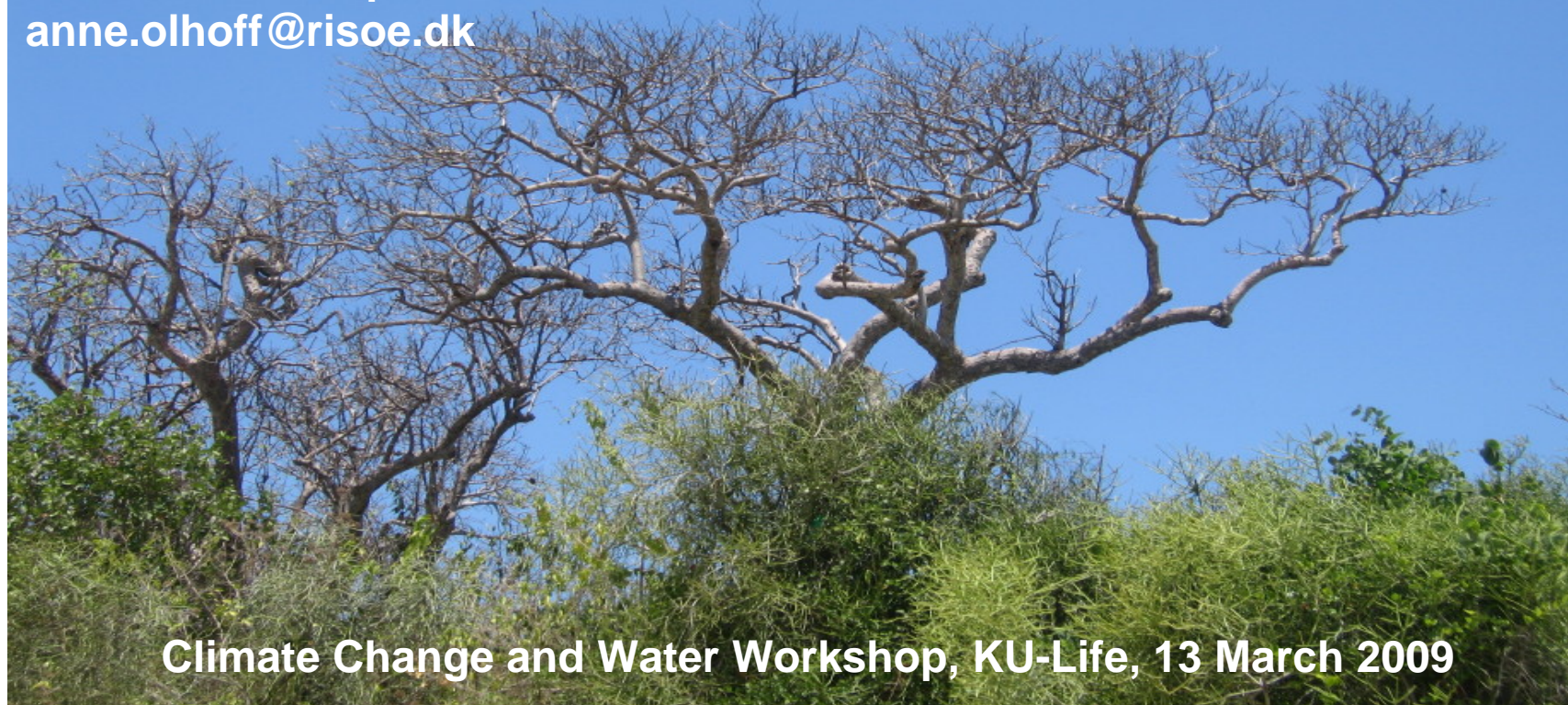
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Approaches to CC Adaptation in Developing Countries and Examples from Sub-Saharan Africa

Anne Olhoff, Coordinator Climate Strategies and Resilient Development, UNEP Risoe Centre
anne.olhoff@risoe.dk



Climate Change and Water Workshop, KU-Life, 13 March 2009

Outline of presentation

- A brief introduction to the CC DARE programme
- The need for adaptation action in sub-Saharan Africa
- Development and adaptation linkages
- Integrating CC adaptation into development planning and policies
- Examples from sub-Saharan Africa

Climate Change and Development – Adapting by REducing vulnerability (CC DARE)

- A USD 8 mill. joint UNEP-UNDP project funded by Danida aimed at providing demand-driven, rapid, targeted and flexible technical and financial support to sub-Saharan African countries.
- The support is made available to assist countries to remove barriers for the integration of climate change issues into development planning and decision-making frameworks.
- Project will run for three years and possibly expand to other regions, funds permitting.
- Country activities are selected based on proposals submitted by various stakeholders in the CC DARE partner countries

CC DARE

- 15 countries in sub-Saharan Africa targeted – 4 country missions completed in 2008, 11 planned for 2009 and 2010.
- Technical assistance provided by UNEP/UNDP, UNEP Risoe and UNEP DHI Centre in close cooperation with regional and international experts.
- Build on NAPA's, national communications, PRSP's etc.
- Coordinate and collaborate with other regional initiatives
- Help to establish better information and data to support policy decisions and planning.
- 41 proposals submitted and reviewed so far.
- Implementation of activities commenced in Uganda and Senegal and will start shortly in Benin and Tanzania
- 4 Regional training courses and publication of technical background materials planned for 2009

Potential Climate Change Impacts and Vulnerabilities in Africa

- By 2020, between 75 and 250 million people are projected to be exposed to an increase of water stress due to climate change
- Low-lying coastal regions are vulnerable due to the threat of sea-level rise and increased occurrence of extreme weather events. Towards the end of the 21st century, the cost of adaptation could amount to at least 5 to 10% of GDP.
- Human health potentially impacted, particularly in areas with low adaptive capacity

IPCC 4AR, WG II conclusions

Potential Climate Change Impacts and Vulnerabilities in Africa

- By 2020, in some countries, yields from rain-fed agriculture could be reduced by up to 50%. Agricultural production, including access to food, in many African countries is projected to be severely compromised with adverse effects on food security and malnutrition.
- By 2080, an increase of 5 to 8% of arid and semi-arid land in Africa is projected under a range of climate scenarios.

IPCC 4AR, WG II conclusions

Adaptation - Development Linkages

- Developing countries are already affected by climate variability
- The poorest countries, communities and population groups will suffer earliest and most
- National development gains and achievement of the Millennium Development Goals are at risk
- There is a strong positive correlation between development level and adaptive capacity
- There is an inverse relationship between development level and vulnerability
- Water is a cross-cutting issue

Adaptation and Mainstreaming

- Increased recognition of the need for mainstreaming or integrating climate change issues into national development planning and policy-making processes for adaptation to be successful

But: How is this done in practice?

- Climate screening, proofing and mainstreaming tools and methodologies are still under development
- Some are difficult to operationalise and there are few empirical examples on climate proofing and mainstreaming

Elements of mainstreaming I

- Assessment of the climate change impacts, key vulnerabilities and linkages to development:
 - Downscaling of climate models and climate change projections
 - Climate screening
 - Technical analyses of socio-economic implications
- Continuous strengthening of institutions and capacities (e.g. Met. institutions, academia, NGOs)
- Assessment of the governmental, political and institutional context for climate change adaptation and mainstreaming
- Awareness raising and sensitisation

Elements of mainstreaming II

- Conducting country/district/community specific analyses:
 - Economic analysis of climate change impacts
 - Vulnerability and adaptation assessments
- Influencing policy processes at national, sector and sub-national levels based on development and costing of:
 - Climate change adaptation policy measures
 - Climate proofing examples and options

Elements of mainstreaming III

- Full mainstreaming requires that:
 - Climate change issues are integrated in the national monitoring system: scientific and policy indicators, scenarios and socio-economic impact analyses
 - Climate change adaptation measures appear in national budgeting and financing
 - Supporting policy measures are implemented at national, sectoral and local levels.

In other words:

- A multiplicity of approaches are necessary for adaptation to be successful at larger scale and for mainstreaming climate change into national planning and policy-making
- Mainstreaming is a process. It involves and requires a number of different building blocks including scientific, socio-economic and political analyses, capacity building and barrier removal

Experiences from climate screening and CC DARE in Africa

- In most countries, there are several potential entry points for initiating a process towards mainstreaming:
 - Revisions or updates to development plans at national, sectoral and sub-national levels
 - New water/agriculture/energy, etc. sector programmes
- Mainstreaming experiences often exist in areas such as environmental impacts and gender issues
- Climate vulnerability is increasingly perceived as a cross-cutting issue that should be dealt with by finance, planning authorities, agriculture, water, environment, health and corresponding local authorities
- Lack of capacity to implement policy measures and lack of capacity to analyse, evaluate and prioritize various climate impacts and adaptation options .

Examples of CC DARE Activities - Uganda

- **Integrating climate change issues into the agricultural sector** inputs to national and sectoral frameworks. (Ministry of Agriculture, Animal Industry and Fisheries (MAAIF))
- **Climate change awareness raising:** preparation of a film documentary on climate change impacts and adaptation; preparation of print and audio products; and dissemination of the this to the public through seminars (implemented jointly by Department of Meteorology, GREAT Lakes film Production Company, and the Farmers Media Link Centre).
- **Adapting to Climate Change through increased Water and Nutrient use Efficiency for increased Crop Productivity and Environmental Health** (National Agricultural Research Laboratories – Kawanda and National Agricultural Research Organization)

Examples of CC DARE Activities - Senegal

- **Integrating climate change risk implications in national planning and strategic programming.** (Ministry of Economy and Finance)
- **Raising awareness** of the population and elected representatives on integration of climate risks in urbanization plans for Rufisque and Bargny. (Direction de L'Aménagement du Territoire)
- **Consolidation and strengthening of capacities** related to local plans for adaptation to climate change. (Council of Non-Governmental Organizations Support for Development (CONGAD))

Examples of CC DARE Activities - Benin

- Developing and incorporating climate change, impacts, and adaptation in the primary and secondary **school curricula**.
- **Strengthening the technical capacity** of the municipal councils of Alibori to reduce vulnerability through training seminars in local languages as well as mass media (radio) and development of annual development plans that take climate change impacts and adaptation into account, c)
- Development of **national adaptation capacity and vulnerability evaluation tools** in the sectors of agriculture and water resources.

Examples of CC DARE Activities - Tanzania

- Analysing current management practices of **smallholder woodlots** and marketing of timber in order to develop adaptation strategies that simultaneously improve forest management and livelihoods of local communities in Makete District.
- Identification, documentation, and empirical verification of **indigenous weather forecasting** methods to adapt to climate change within the Sukuma, Gogo, Nyamwezi and Maasai communities and dissemination of knowledge on the robustness of these methods.

Conclusions

- Mainstreaming is a gradual process involving a broad range of technical expertise and approaches, participation of all relevant ministries and stakeholders, awareness raising and institutional capacity building
- Small and targeted assistance can assist countries in addressing some of the immediate bottlenecks for adaptation and help them prepare for the larger adaptation funds that will become available
- Awareness raising and basic knowledge on and analyses of the context specific linkages between climate change, vulnerability, adaptation and development are necessary as a first step towards mainstreaming
- Country examples illustrate the scope for a demand driven process backed up with technical and financial support.

Thank You
More information is available from
<http://ccdare.org>
<http://uneprisoe.org>